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EXAMINER	
NGUYEN, SIMON	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,534	HAHN ET AL.	
	Examiner	Art Unit	
	SIMON D. NGUYEN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: There is a double term “is” in front of “performed”. Appropriate correction is required.

Response to Arguments

2. Applicant's arguments filed 10/22/08 have been fully considered but they are not persuasive. According to Applicant’s Remarks:

a) Luo fails to suggest or disclose the wireless LAN coupled with an IP multimedia subsystem;

b) Neither Luo nor Ejzak disclose or suggest the authentication obtained through a SIP registration:

c) No suggestion to combine.

Responsive to Remarks:

a) Fig. 1 of Luo discloses WLAN subnet 104 as a WLAN in which the WLAN provides an IP address for a mobile host (MH 106), wherein the IP address of the mobile host is authenticated by a web authentication server 114 to allow the mobile host to access information on the Internet where the information on the internet is considered as a multimedia information. Now the question is whether the WLAN coupled with an IP multimedia subsystem. According to figures 1-2, paragraphs 26-31, the Web authentication server 114 authenticated the IP addresses of all mobile hosts in WLANs

prior to allow the mobile hosts access information on Internet as they move from one WLAN subnet to other WLAN subnet which means that the web authentication server in the combination of other devices such as server 110, 112, controller 116, mobile state database 108 act as an IP multimedia subsystem for the WLAN subnets in a large scale WLAN network 100. From the above citation, Luo teaches the WLAN coupled to the IP multimedia subsystem.

Furthermore, Ejzak in Abstract and fig. 1, also discloses a radio access node (RAN 121) coupled to an IP multimedia subsystem 141 wherein the RAN is considered (inherently) as a WLAN.

b) Ejzak discloses a SIP registration for a mobile unit (paragraphs 56, 82-84, 91), wherein the SIP registration used to obtain an authentication (paragraphs 94, 98, claim 1).

c) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Luo and Ejzak disclose the method and apparatus for authenticating of the IP address of the mobile unit in the WLAN in order to allow the mobile unit to access the IP multimedia information in the mobile network. The reason for combining a SIP registration as taught

by Ejzak in Luo's system is that the SIP registration is well known, and compatible to all mobile networks which will provide more security and privacy to users than a conventional registration.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-21, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (US 2003/0169713 A1) in view of Ejzak (US 2003/0027595 A1).

Regarding claim 1, Luo discloses a method for authenticating a subscriber (MH 106) for utilizing services in a wireless LAN while using an IP multimedia subsystem (a WLAN subnet 104 allowing the subscriber to access the information via authentication of IP address is considered as IP multimedia subsystem) of a mobile radio network (fig.1, abstract, title), comprising: receiving an IP address from the wireless LAN, wherein the IP address is authenticated by web authentication server 114 while giving the IP address as the subscriber registering with the network (address registration protocol) (abstract, pars. 9-10, 14, 18-19, 26, 31, 38, 46, 51) ; and notifying an element (MAP) of the wireless LAN about the result of the authentication of the subscriber with regard to the IP multimedia subsystem (paragraphs 35, 44-47, fig.1). It should be noted that Luo has disclosed the WLAN only allow the host (user) to obtain IP networking

configuration parameters and to communicate with a Web-based authentication server for initial authentication for registering users. Once a user is authenticated to the WLAN, the user's mobile host obtains full IP connectivity (abstract, par. 14, 18) and wherein the registration of the mobile unit with the network via address registration protocol (par. 31) which obviously means the registration is based on SIP registration. However, Luo does not specifically disclose the term "SIP" registration.

Ejzak discloses a communication system (figs. 1-2), comprising: a radio area network (a RAN is considered as a wireless LAN which is known to those skilled in the art) uses an IP multimedia subsystem (141) in which an IP address allocates to a MT or TE by means of SIP registration (abstract, pars. 10, 56, 82-84, 91, 98-99, 109, 112, 114, claim 1), wherein the registration includes the authentication of the MT or TE (par. 94). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Luo, modified by Ejzak to improve the registration procedure in order to secure the system accessing.

Regarding claim 23, this claim is rejected for the same reason as set forth in claim 1, wherein a device is Web authentication server 114 (fig.1), an IP multimedia system is all elements in a large-scale WLAN network 100 (fig.1), and an IP multimedia subsystem is a WLAN subnet 104.

Regarding claim 2, Luo further discloses the authentication used at a home subscriber system (paragraphs 26, 29, 35, 44, 47, 51).

Regarding claim 3, Luo further discloses the authentication performing by an authentication server (abstract, paragraphs 14, 18, 20, 27-29).

Regarding claim 4, Luo discloses a register message sent to a home agent then to the authentication server for authenticating the mobile host (or subscriber) (see the rejection of claims 1-3 above). However, Luo does not specifically disclose the term "SIP registration". Ejzak discloses the subscriber (MT) transmits the SIP register message to the IP multimedia subsystem (paragraphs 64, 98, claim 1).

Regarding claim 5, Luo further discloses an air interface between a mobile host (106) (subscriber) with the wireless LAN (fig.1-2, paragraphs 17, 23, 28, 34).

Regarding claim 6, Luo further discloses the subscriber (MH 106) receives the IP address from the wireless LAN with other IP transport to receive/transmit registration messages and authentication message from the IP multimedia subsystem (104) (see the rejection of claims 1, 4 above).

Regarding claim 7, Luo further discloses a gateway of WLAN monitoring the authentication (paragraph 35).

Regarding claims 8-9, Ejzak discloses different interfaces comprising a Gi interface, an Mm interface (figs. 1-2, pars. 30, 32, 36, 52).

Regarding claim 10, Luo further discloses when the subscriber or mobile host roaming away from home, the result of authentication is fed to a wireless LAN gateway by message control function at a location having the WLAN coverage (abstract, paragraph 35).

Regarding claims 11-13, Luo discloses the WLAN having a state control function (MAP) to control a mobile state table (see the table in the left side of fig.1) which forwards the register messages to a corresponding entity in the IP multimedia

subsystem (WLAN subnet) for authenticating and control the WLAN gateway with regard to the authentication result for data (packet) to be handled by the WLAN gateway(abstract, pars. 19-35, 50-51) and wherein the authentication can be resulted as grants, restricts, declines a quantity of the data flow of the subscriber through the wireless LAN gateway (paragraphs 23, 27, 35).

Regarding claim 14, Luo discloses the policy control function such as limited access, normal access or blocked access (paragraphs 23, 27, 35) which is part of proxy-call state control function node.

Regarding claims 15-16, Luo discloses when the subscriber (MH 106) is roaming (moving into another subnet, or foreign agent, for example), the authentication result is fed to the WLAN gateway (for example, when the MH 105 moves into WLAN subnet or to a new access point, this WLAN subnet or the new access point is call a WLAN gateway because it is not a home WLAN of the MH (pars. 19-35).

Regarding claim 17, Ejzak discloses an inter-network in which a WLAN (RAN) is connected to the IP multimedia subsystem VIA A Gi interface, a MM interface and an another interface is installed between the call state control function node of the IP subsystem and the WLAN (RAN) for protecting data transfer (pars. 20, 32, 36, 40-41, 46, 49, 50, 72-78, fig.1).

Regarding claims 18-20, Luo further discloses the gateway evaluates the authentication result by expanding functionalities in the WLAN gateway, and allows the packet of MH 106 to pass (changed from “limited” to “normal”) , wherein the evaluation is implemented using an application layer gateway ((par. 35-44).

Regarding claim 21, Luo further discloses the MH 106 works in a WLAN and in a mobile communication network (fig. 1).

Regarding claims 24-26, Luo disclose home MAP102 as a home WLAN of the subscriber or MH 106, wherein the home MAP 102 (or a home agent) as a second device. Furthermore, Luo also discloses foreign MAP 102 (when the MH 106 moves from one access point to another in WLAN, wherein the foreign MAP is a third device (fig.1, abstract, paragraphs 19, 35, 51), wherein the second and third device associated with the proxy call state control function as shown as Mobile state table 118 for controlling authentication in the WLAN and wherein the third device (WLAN gateway or WLAN foreign MAP for allowing the MH 106' s data to pass through (fig.1, pars 19, 21-22, 35-44).

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (US 2003/0169713 A1) in view of Ejzak (US 2003/0027595 A1) as applied to claim 1, and further in view of Christoffel et al. (2002/0136226).

Regarding claim 22, Luo discloses the WLAN with IEEE 802.11 (pars. 5-12). However, the modified Luo fails to teach the system is the combination of an ETSI HiperLAN and IEEE 802.11.

Christoffel discloses a communication system in which a subscriber roams in a WLAN and a mobile communication system via an authentication (abstract, fig. 6, paragraph 133, 138, 141), wherein the system is a combination of ETSI HiperLAN and IEEE 802.11 (par. 62). Therefore, it would have been obviously for those skilled in the

art at the time the invention was made to have modified Luo, modified by Christoffel to secure an access as well data transferring in order to improve the system performance.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 21, 2009

/SIMON D NGUYEN/
Primary Examiner, Art Unit 2618